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09/863,449	05/24/2001	Takeo Katsuda	011350-273	9824

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EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 10/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,449

Applicant(s)

KATSUDA ET AL.

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11-17, 29 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 4-10, 18-28, 30, 31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

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DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 3 recites the limitation "said device" in line 3. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether "said device" is referring to the image forming device or the other device in claim 1.

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Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 32-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention is a computer related invention. The Computer-Implemented Invention Guidelines issued by the U.S. Patent and Trademark Office describe the procedures for examining such inventions.

The first step is to determine whether the invention as defined by the claims falls within one of the three following categories of unpatentable subject matter: (1) Functional descriptive material such as a data structure *per se* or a computer program *per se*, (2) Non-functional descriptive material such as music, literary works or pure data, embodied on a computer readable medium; or (3) A natural phenomenon such as energy or magnetism. The invention as defined by the claims is not a natural phenomenon or pure data, however, it appears to be a computer program. If Applicants consider this invention as a computer program *per se*, it is unstatutory for this reason.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 11-14, 29, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Miura (US 6,369,914).

Regarding claim 1: Lobiondo teaches an image forming device (fig. 2, column 3, lines 29-32) connected to a network (column 3, line 44) comprising: an interface (the software of the scheduler that receives a print job, column 3, lines 40-45, column 4, lines 30-35) receiving a print job; a memory (data base, column 3, line 68) storing location information (the information that identifies the printer location in the network, column 5, lines 15-20) of one or more other devices (printer, column 5, line 21) connected with the device via the network; a processor (the processing unit in the scheduler that executes the software of the scheduler, column 3, lines 40-43) executing a process of transferring a portion of or all of the received print jobs to one or more transfer destinations that are included in the other devices (column 4, lines 60-68); a printing unit (printer, column 3, line 31) and an informer for informing printing location information of the transfer destinations to which the print job is transferred to a user. (Column 5, lines 18-25)

Lobiondo does not teach the user is informed by printing the information/printing location to be informed to the user.

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Miura, in the same area of solving how information can be informed to a user, teaches that the user is informed by printing the information to be informed to the user. (Column 5, lines 7, lines 1-3)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: user is informed of information/printing location by printing the information/printing location, using the printer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Miura because of the following reasons (a) it would have allowed printer information of Lobiondo to be easily convey to a user; (b) printing a message to a user is being recognized as one of the easiest way of communication and has been used by human for thousands of years, such as printing information on papers, walls, wood, ground, buildings, and signs.

Regarding claim 2: Lobiondo teaches wherein the processor divides the received print job and transfers a portion of the print job as a result of the division. (Column 4, lines 60-68)

Regarding claim 3: Lobiondo teaches wherein the processor divides the received print job into printable pages (the print job pages that can be printed by a selected printer, column 5, lines 50-62) and non-printable pages (the print job pages that cannot be printed by a selected printer, column 5, lines 50-62) in the device, and transfers the non-printable pages among the received print jobs.

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Regarding claim 11: Lobiondo teaches wherein the printing unit prints location information of the transfer destinations adding a mark (printed location information, inherently is a mark different from other pages in the print job) that is different from that of other pages of the print job.

Regarding claim 12: Lobiondo teaches wherein the processor divides the received print job by page (inherent properties of dividing any portions of a print job to be printed by different printers, column 5, lines 1-5, e.g., all pages of a set of document go to a printer and all pages of another set goes to another printer) and transfers it.

Regarding claim 13: Lobiondo teaches wherein the processor divides the received print job by number of copies (column 5, lines 10-14, column 4, lines 35-36) and transfers it.

Regarding claim 14: Lobiondo teaches an error detecting sensor, (the program that detects the problem, column 5, lines 5-62) wherein the processor transfers a portion or all of the received print job when an error is detected.

Regarding claim 29: Lobiondo teaches a control method for an image forming device (fig. 2) connected to a network (column 3, line 44) comprising: a step of receiving a print job (column 3, lines 40-45, column 4, lines 30-35); a transfer step of transferring a portion or all of the received print job to one or more transfer destinations (column 4, lines 60-68) that are included in one or more other devices (printers 10, column 3, lines 30-32) connected with the image forming device via the network (fig. 1); a step of accessing a memory, (memory, column 4, line 1) in which locations (location and where, column 5, lines 15-25) of the other devices are stored in

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advance, (column 4, lines 1-1-5) to acquire the location information of the transfer destinations (location, column 5, line 17; printer location is information regarding a printer and is located in the memory, column 4, lines 1-2) to which the print job is transferred; and informing printing location information of the transfer destinations to which the print job is transferred to a user. (Column 5, lines 18-25)

Lobiondo does not teach the user is informed by printing the information/printing location to be informed to the user.

Miura, in the same area of solving how information can be informed to a user, teaches that the user is informed by printing the information to be informed to the user. (Column 5, lines 7, lines 1-3)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: user is informed of information/printing location by printing the information/printing location, using the printer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Miura because of the following reasons (a) it would have allowed printer information of Lobiondo to be easily convey to a user; (b) printing a message to a user is being recognized as one of the easiest way of communication and has been used by human for thousands of years, such as printing information on papers, walls, wood, ground, buildings, and signs.

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Regarding claim 32: Lobiondo teaches a computer memory/product (inherently, computer software, column 3, line 42 is being stored in a computer program memory/product) for controlling the image forming device (workstation 30, column 3, lines 30-35) for carrying out the control method of claim 29. Please see claim 29.

9. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Miura (US 6,369,914) as applied to claim 1, 14 above, and further in view of well-known prior art.

Regarding claim 15: Lobiondo does not teach wherein the error detected by the sensor is toner emptiness.

Lobiondo teaches to detect whether a print job can be completed by a selected printer, column 5, lines 45-62. Inherently, a printer cannot complete a print job if the printer run out of toner.

It is well known in the art (official notice) to use a sensor to detect toner emptiness.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system to include: a sensor to detect toner emptiness.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system by the teaching of well-

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known prior art because it would have allowed to system to detect whether the printer can complete a print job or not.

Regarding claim 16: Lobiondo does not teach wherein the error detected by the sensor is toner emptiness.

Lobiondo teaches to detect whether a print job can be completed by a selected printer, column 5, lines 45-62. Inherently, a printer cannot complete a print job if the printer runs out of paper.

It is well known in the art (official notice) to use a sensor to detect paper emptiness.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system to include: a sensor to detect paper emptiness.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system by the teaching of well-known prior art because it would have allowed to system to detect whether the printer can complete a print job or not.

Regarding claim 17: Lobiondo does not teach wherein the processor transfers a portion or all of the received print job when a font specified in the received print job is not stored in a font memory.

Lobiondo teaches to detect whether a print job can be completed by a selected printer, and to transfer a portion or all of the received print job when the print job can be completed by the

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selected printer, column 5, lines 45-62. Inherently, a printer cannot complete a print job if the printer does not have a font specified in the received print job.

It is well known in the art (official notice) that a printer has limited fonts stored in memory for printing a print job.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system to include: limited fonts stored in memory for printing a print job, wherein the processor transfers a portion or all of the received print job when a font specified in the received print job is not stored in a font memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo/Miura printing system by the teaching of well-known prior art because it would have allowed to system to print a print job that requires printing fonts.

Allowable Subject Matter

10. Claims 4-10, 18-28, 30, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

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Regarding claim 4: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 4 identifies “wherein said processor divides the received print job into color image pages and monochromatic image pages, and transfers either the color pages or the monochromatic pages among the received print job.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fails to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 5: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 5 identifies “wherein said processor divides the received print job according to page sizes, and transfers the pages of at least one size among the received print job.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fails to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 6: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 6 identifies “wherein said printing unit prints location information of said transfer destinations on a

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sheet of paper with one or more characteristics that are different from those of other pages of the print job.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 10: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 10 identifies “wherein said printing unit prints location information of said transfer destinations in a color that is different from that of other pages of the print job.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 18: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 18 identifies “wherein said printing unit prints a map showing the transfer destinations to which the print job is transferred.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to

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anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 19: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 19 identifies “wherein said processor divides the received print job and transfers a portion of the print job obtained as a result of the division; and said printing unit insert-prints location information of said transfer destinations to which the print job is transferred in place of pages that correspond to the portion of the print job that is transferred.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claim 28: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 28 identifies “wherein said processor divides the received print job and transfers a portion of the print job obtained as a result of the division; and said printing unit prints location information of said transfer destinations to which the print job is transferred correlatively with the page numbers of the transferred pages.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to

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anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claims 30: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 30 identifies “printing step insert-prints the location information of the transfer destinations to which the print job is transferred in place of pages that correspond to the portion of the print job that is transferred.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

Regarding claims 31: The present invention is directed to a printer of transferring portions of print job to other printers and informing the user where the other printers are located. Claim 31 identifies “printing procedure prints the location information of the transfer destinations to which the print job is transferred correlatively with the page numbers of the transferred pages.” The closest prior art, Lobiondo (US 5,287,194) disclosed a similar printer of transferring portions of print job to other printers and informing the user where the other printers are located, either singularly or in combination with other cited references, fail to anticipate the above limitations or render the above limitations obvious to be used with other claimed limitations.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

October 17, 2003

King Y. Poon